

# Cargo Planning at SFO

California Freight Advisory Committee  
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# Presentation Topics

- Overview of the San Francisco International Airport (SFO)
- Future Airport Development Plan (ADP)
- Cargo Specific Updates
  - Forecast tracking
  - Recommended cargo developments
  - Green initiatives

# Overview

**SFO is the busiest passenger airport in the Bay Area**



**busiest in the U.S.<sup>1</sup>**



**busiest in the world<sup>1</sup>**

Notes:  
1/ Airports Council International – 2016 North American Airport Traffic Summary

**57.  
8**

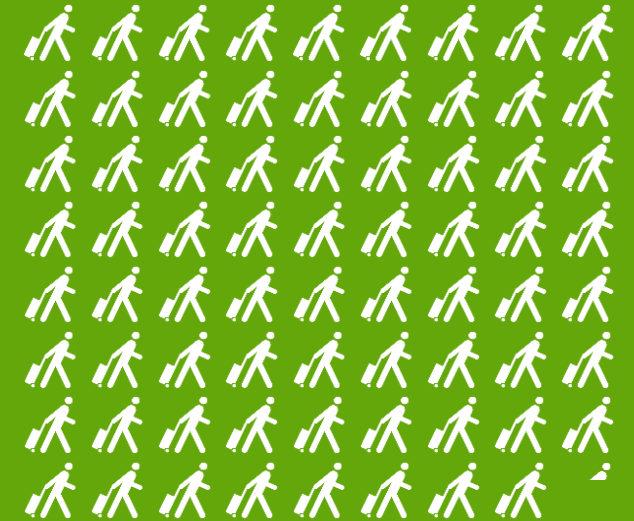
million

**Passengers  
accommodated  
in 2018**

**43,000 on-airport jobs  
\$8.4B business revenue**

**470,000 operations in 2018  
517,000 metric tons of cargo/mail in  
2018  
336,000 metric tons international cargo  
in 2018**

**Future forecast to  
accommodate 71.1 million  
annual passengers based  
on existing runway layout**

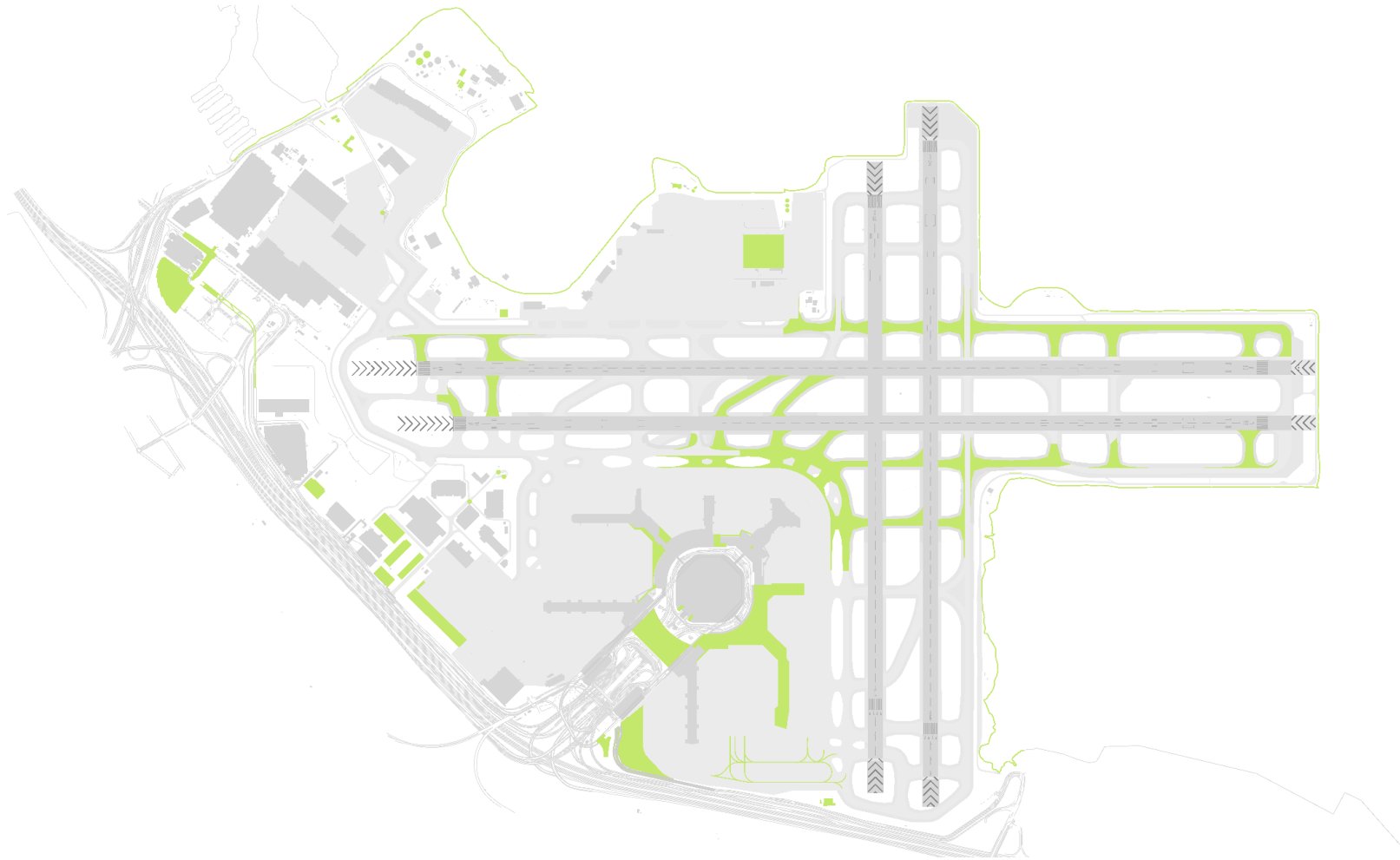


 = 1 million passengers

# What is the ADP?

- Long-range planning study
- Guides future development at SFO
- Update to 1989 Master Plan

# Ongoing Master Plan Projects





# Ongoing Projects

Airport Hotel



SFO

# Ongoing Projects

## Terminal 1 Redevelopment





# Ongoing Projects

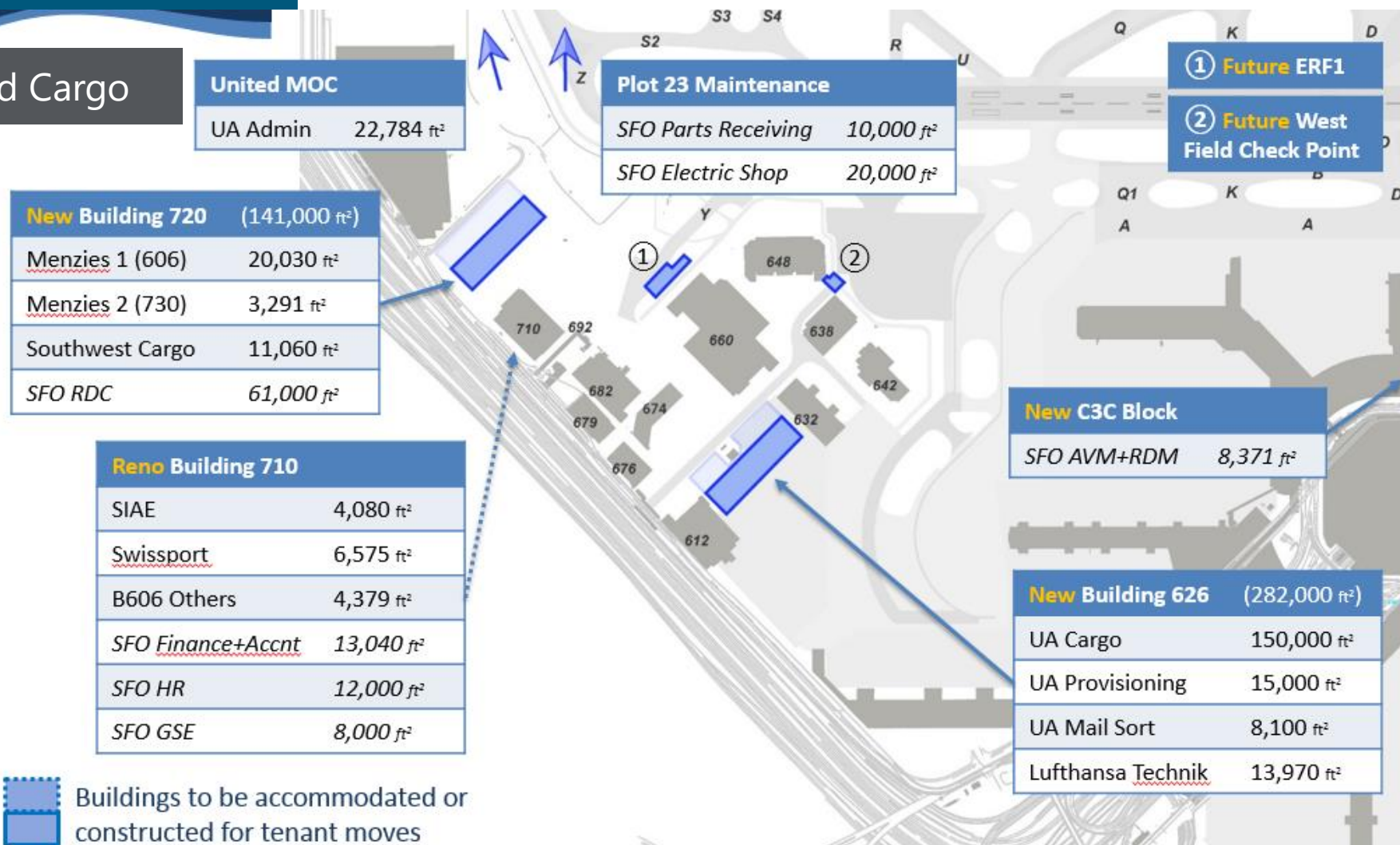
## Long-Term Parking Garage 2





# Ongoing Projects

## Planned West Field Cargo



# What's in the ADP

- Forms basis for environmental review
- Includes proposed terminal, roadway, support facilities (includes cargo)
- No plans for runway expansion

# Goal of the ADP

- Continue to modernize SFO
- Enhance passenger experience
- Match terminal, parking, support facilities to existing runway capacity

# What the ADP won't do

- Won't change runway configurations or flight paths
- Won't expand airport property footprint
- Won't increase runway capacity



# Recommended ADP projects



An aerial architectural rendering of the International Terminal Building Redevelopment project at San Francisco International Airport (SFO). The image shows a large, modern terminal building with a curved, glass-enclosed section and a large, open-air plaza area. The plaza is filled with numerous small, dark, rectangular structures, possibly representing seating or landscaping. The building is surrounded by a parking lot and a road. The overall design is modern and functional, with a focus on creating a large, open space for passengers.

# Recommended ADP projects

International Terminal Building Redevelopment





# Recommended ADP projects

Boarding Area H

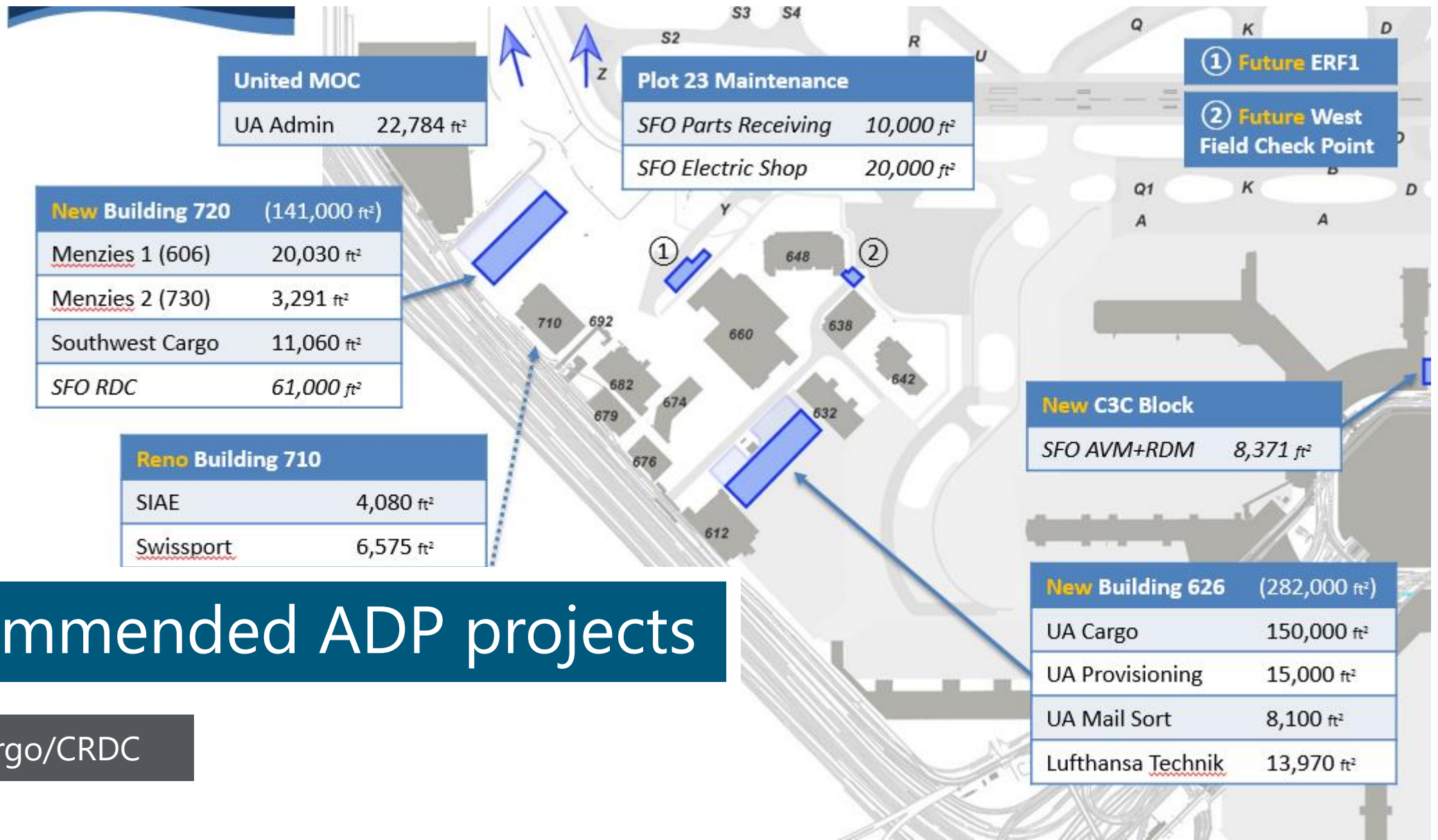


An aerial, high-angle view of a large airport terminal complex. The terminal is a long, rectangular building with a central section that is wider and has a glass facade. It is surrounded by extensive parking lots filled with small, grey car models. A curved road or highway runs along the top and right sides of the terminal. The sky is a clear, bright blue.

# Recommended ADP projects

Central Hub Garage





# Recommended ADP projects

New Cargo/CRDC



## EARLY 2019

- Notice of Preparation (NOP)
- Public Scoping Meeting(s)

## LATE 2019

- Notice of Public Hearing and Availability of Draft EIR
- Public Review Period and Public Hearing (45 days)

## MID 2020

- Final EIR / Notice of Availability (NOA)
- Certification and Adoption

## IMPLEMENTATION

## 2020-2035

- Projects Constructed (when triggered by demand)

# Cargo Specific Updates

- Forecast tracking
- Recommended cargo developments
- Green initiatives

# Forecast Tracking

- Caltrans California Air Cargo Groundside Needs Study (2013) vs. 571,000 metric tons in 2018 – about 6 years ahead of forecast

## AIR CARGO FORECAST San Francisco International Airport (SFO)

	2011	2012E	2015	2020	2025	2030	2035	2040	2012-40 CAGR
Cargo (in Metric Tons)									
Domestic	115,666	127,423	127,400	146,300	164,700	184,500	208,200	235,400	2.2%
International	224,982	209,933	209,900	277,600	352,100	442,000	534,200	639,700	4.1%
Mail	41,239	43,434	43,500	52,900	62,700	74,000	85,000	96,800	2.9%
Total	381,887	380,790	380,800	476,800	579,500	700,500	827,400	971,900	3.4%
Belly/Freighter Split									
Belly	76%	74%	74%	75%	76%	77%	77%	77%	
Freighter	24%	26%	26%	25%	24%	23%	23%	23%	
Total	100%	100%	100%	100%	100%	100%	100%	100%	
Freighter Operations	6,782	6,274	6,100	7,000	7,900	8,800	10,230	12,020	2.3%

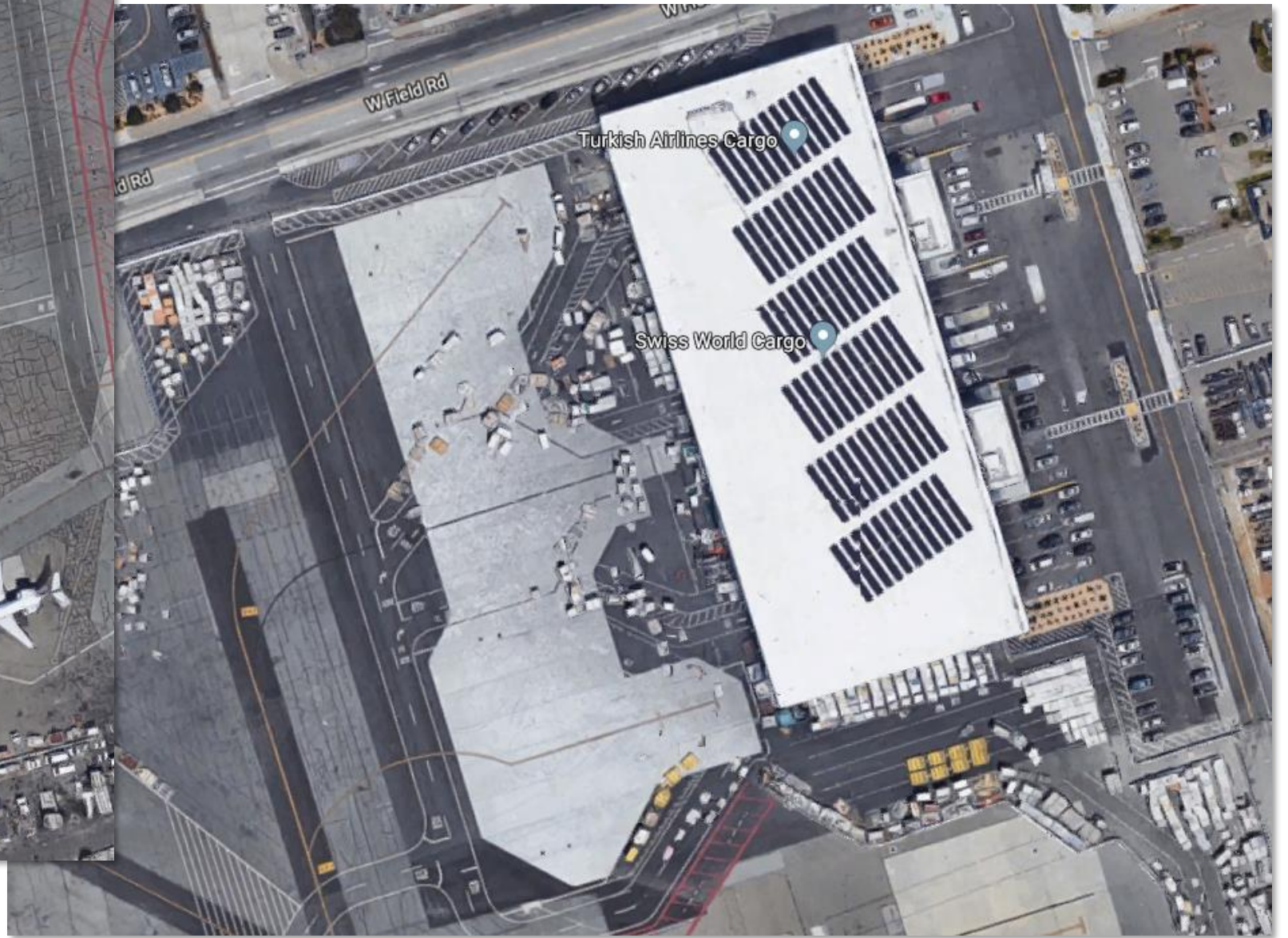
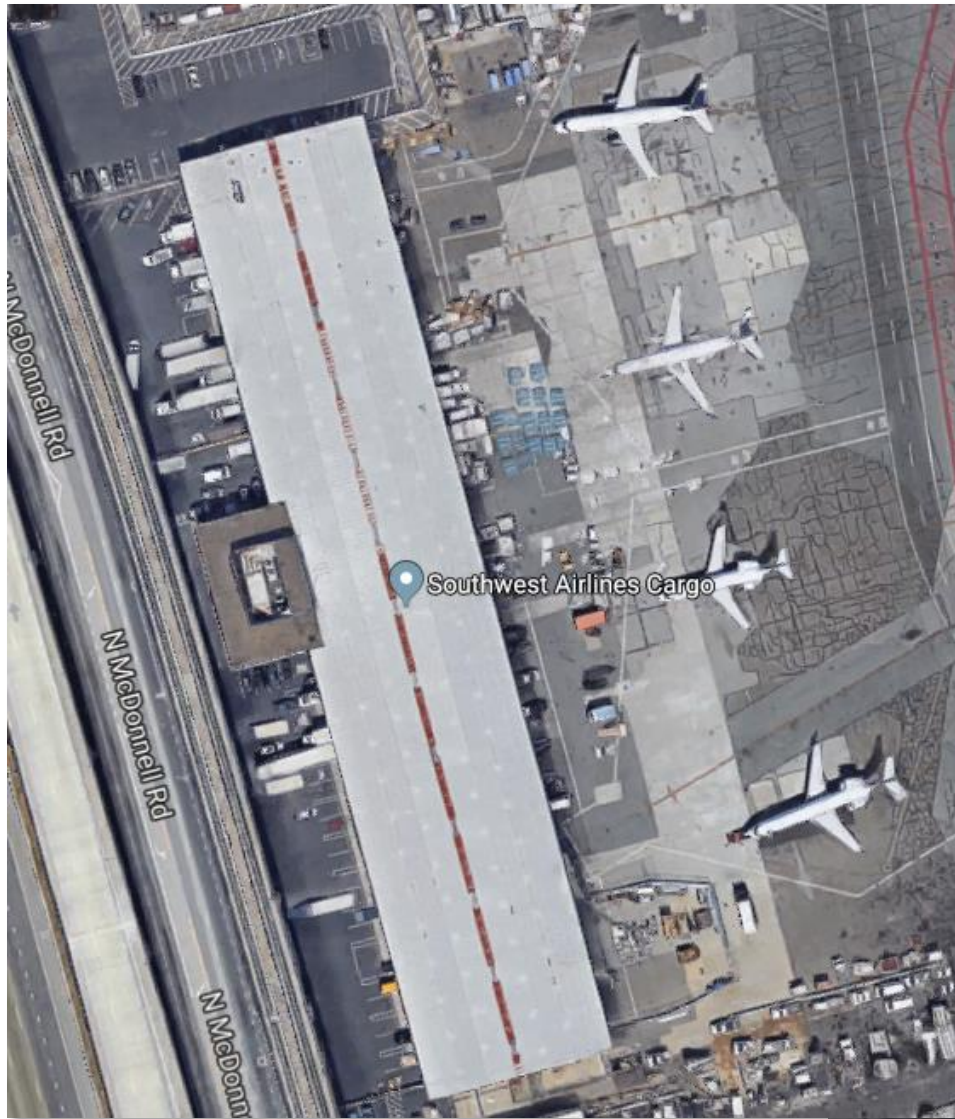
Note: "E" refers to estimate.

Sources: Landrum & Brown and San Francisco International Airport.



# Recommended Developments

- Transition from ground leases to building leases and multi-tenant buildings
- Multilevel cargo buildings with improved container operations and storage
- Opportunities for off-airport transshipment and buildup of pallets, containers, and unit load devices



# Green Initiatives

- Electric Ground Service Equipment (eGSE) program
- Sustainable Aviation Fuel (SAF) program

# eGSE Program

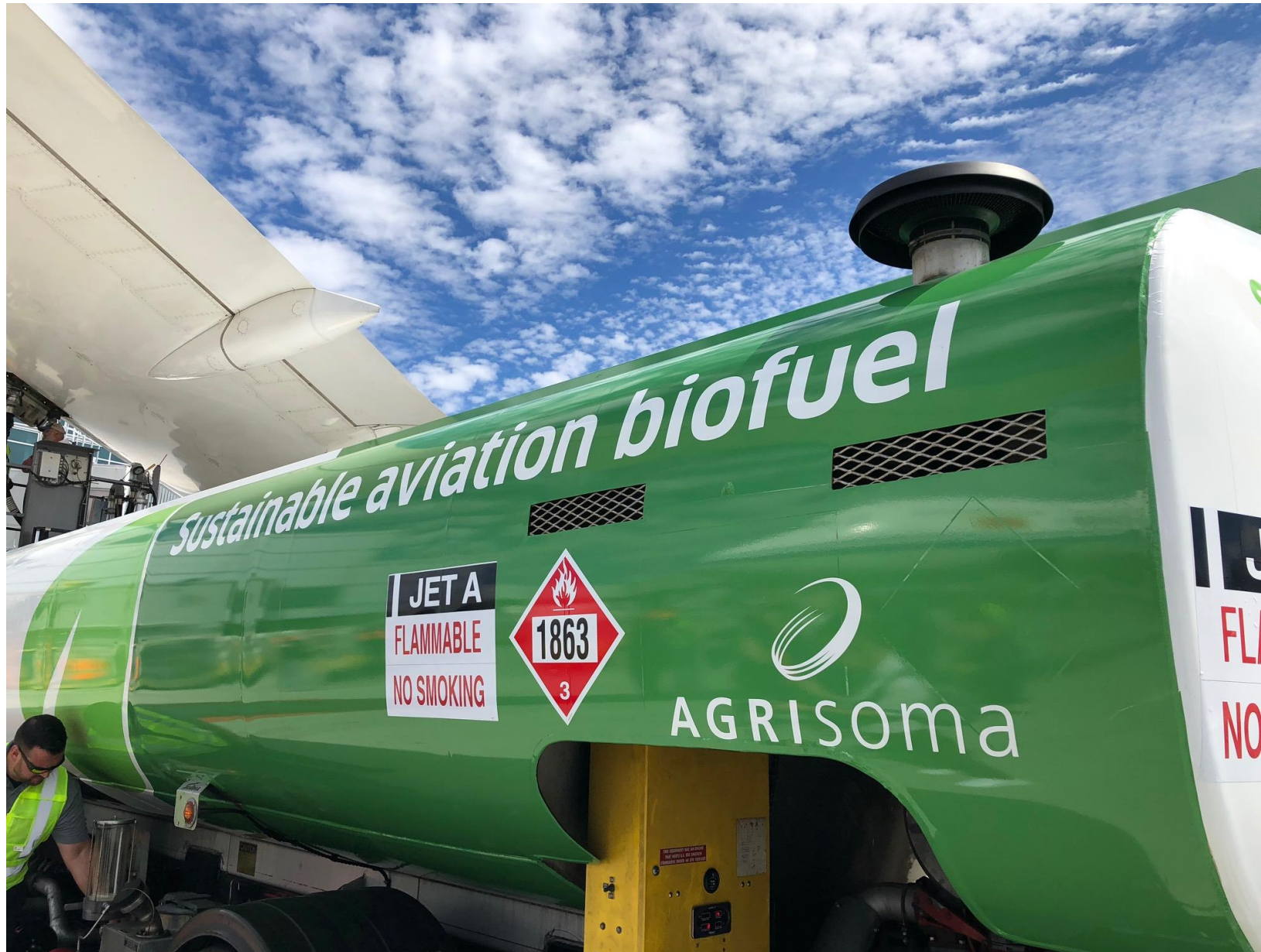
- Currently about 35% of airfield GSE at SFO is electric
- Installing GSE charging stations throughout the new Terminal 1
- Upcoming project to install additional charging stations at Terminal 2 and International Boarding Area G
- Engaging with ground service providers to assess future needs through an executive-sponsored working group
- Coordinating with other airports on eGSE activity and policy directives
- Collecting asset data from ground operators to understand fleet management and turnover issues





# SAF Program

- 150 Member SFO Stakeholder Working Group - 10 MOU Signatories
- Co-Lead of ACI-NA SAF Task Group (with SEA)
- Delivering Logistics Infrastructure & Supply Chain Study
- Regular SAF supply via Shell Partnership: 400,000 gal received Oct '18-Mar '19
- Key Need: Additional SAF & Dedicated Airport Infrastructure Funding for GHG Redux



# SFO (airports) and CFAC

- Value of freight vs. volume/weight of freight
- Time criticality of air cargo
- Investment in last mile and connections



**Table 8. Countries that Traded Commodities with Total Value More than \$1 Billion in 2016 through SFO, In Order of Value of Trade**

Trading Partner	Value of Trade 2016 (in \$M's)	Percent of Total SFO Air Trade	Metric Tons 2016	Percent of Total Tonnage
China	\$11,535	21%	69,938	23%
Japan	\$6,696	12%	41,294	13%
Malaysia	\$6,192	11%	9,601	3%
Taiwan	\$5,026	9%	29,460	10%
Korea, Republic Of	\$4,913	9%	23,644	8%
Singapore	\$4,010	7%	13,958	5%
Germany	\$2,094	4%	11,614	4%
Hong Kong	\$1,628	3%	9,865	3%
Thailand	\$1,359	2%	4,773	2%
Switzerland	\$1,235	2%	4,691	2%
Philippines	\$1,118	2%	2,555	1%
Ireland	\$1,022	2%	2,627	1%
Other (224 countries)	\$7,749	14%	84,040	27%
<b>Total</b>	<b>\$54,577</b>	<b>100%</b>	<b>308,060</b>	<b>100%</b>

Source: US Census Bureau Foreign Trade Division, provided by WISERTrade.



# Thank you

